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the user and completing a communication path between the user and said associated DTMF-controlled system, wherein said voice-operated arrangement monitors the communication path and retrieves predetermined voice commands uttered by the user and translates said predetermined voice prompts into DTMF tones which are thereafter transmitted to said associated DTMF-controlled system.

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4. (Amended) The arrangement as defined in claim 1 wherein a plurality of different DTMF-controlled systems are associated with a user and the user record comprises a plurality of different fields for each DTMF-controlled system of said plurality of DTMF-controlled systems.

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- 5. (Amended) The arrangement as defined in claim 4 wherein the plurality of different fields for each DTMF-controlled system of the plurality of DTMF-controlled systems in a user record comprises a dial-out access number for each DTMF-controlled system and a mapping of a plurality of voice commands to an associated plurality of DTMF tone sequences.
- 6. (Amended) The arrangement as defined in claim 5 wherein the plurality of different fields comprises a series of DTMF tones for accessing the proper DTMF-controlled system within the plurality of DTMF-controlled systems.

Remarks

Reconsideration of rejected claims 1-10 is respectfully requested.

In the Office action dated October 30, 2002 (application Paper No. 5), the Examiner objected to and rejected various combinations of the pending claims. The Examiner's objections and rejections will be discussed below in the order appearing in the Office action.

Claim Objections

The Examiner first objected to claim 1, citing a lack of antecedent basis for the phrase "the accessed user's DTMF-controlled system" in line 7. In response, applicants have amended claim 1 to remove the phrase "the accessed user's". It is believed that with this amendment, the Examiner's objection has been overcome. Further, the Examiner objected to claim 6, referring to the phrase "the user's plurality of such systems" as also lacking antecedent basis. Applicants have amended this phrase to now read "the plurality of DTMF-controlled systems", which finds support in independent claim 1. Therefore, applicants believe that both claims 1 and 6 are now in condition for allowance over the Examiner's objections and respectfully request the Examiner to review the amended claims and withdraw the stated objections.

35 USC § 102(e) Rejection - Claims 1-10

The Examiner rejected all pending claims under 35 USC 102(e) as being anticipated by US Patent 4,757,525 (Matthews). For the reasons discussed below, applicants do not agree with the Examiner's characterization of the Matthews reference and respectfully request the Examiner to reconsider this rejection and find all claims 1-10 to be in condition for allowance.

In general, the present invention is directed to "a speech-to-DTMF tone application" that is "accessed by a user wishing to interact with a DTMF-controlled system in a 'hands-free' manner. The speech-to-DTMF tone application is responsive to a user's initial voice prompt ... to allow access to the application and locate the proper user's record in the application database. The speech-to-DTMF tone application looks up the user's access number, dials out to the associated system and then connects the user to the proper DTMF-controlled system. The application stays on the line and 'listens' for predetermined voice commands from the user....When such a voice command occurs, the application performs a translation from the command to the DTMF tones used by the system, and forwards the proper tones to the system....In a preferred embodiment of the present invention when a user has more than one DTMF-controlled system, the speech-to-DTMF tone application is capable of processing through each system and transmitting the individual tones recognized by each system" (page 2, lines 10-30). FIG.

2 illustrates an exemplary user record 22, with a user ID, password, and a plurality of different DTMF-controlled systems, the user record including a "dial-out number" and a plurality of "command"/DTMF tone translations for each system.

Matthews does not disclose or suggest such an arrangement. Matthews illustrates a basic voice message service offering where a user's speech is recognized and used to enter his/her mailbox. The VMS system does not "translate" speech into DTMF tones, and does not "dial out" to other applications. One VMS system may be in communication with another VMS systems, but there is no "user record" in the VMS system that includes a plurality of different "dial-out numbers" for a plurality of DTMF-controlled systems to be accessed by a user, as defined by the presently rejected claims. Additionally, there is no teaching in Matthews of "completing" a communication path" between a user and a DTMF-controlled system, as defined by independent claim 1, or "bridging together the call between the user and the application and the Call between the application and the DTMF-controlled system", as defined by independent claim 8. The only communication path in Matthews is between the user and the VMS system; the VMS system does not thereafter "dial out" and "complete a path" to a DTMF-controlled system/application.

Additionally, as discussed throughout the specification and discussed above, the speech-to-DTMF tone application of the present invention remains on the line and "listens" to the call that is established between the user and the DTMF-controlled system. The application of the present application "listens" for further utterances by the user and then controls the application accordingly (by translating the commands into the specific tones used by that application – see FIG. 2). Independent claim 1 defines this aspect of the present invention at lines 9-12, which reads: "wherein said voice-operated arrangement monitors the communication path and retrieves predetermined voice commands uttered by the user and translates said predetermined voice prompts into DTMF tones which are thereafter transmitted to said DTMF-controlled system". Independent claim 8 defines this aspect as follows: "in response to predefined voice commands uttered by the user and received by the speech-to-DTMF tone application, translating said voice commands into one or more DTMF tones accepted as commands by the DTMF-controlled system".

p.9

In contrast, Matthews is configured to recognize either voice commands or DTMF tones – there is no "translating" from one to the other, nor is there any mapping of voice commands into DTMF sequences. See, for example, Matthews at column 96, beginning at line 22, "After the message has been played, the program proceeds to a decision block 1956 to decide whether DTMF digits or voice response to be recorded is required. This is one of the primitives that the originating user programs in when he selects and/or records the messages".

In light of these significant differences, applicants assert that Matthews cannot be found to anticipate the teachings of the present invention as defined by independent claims 1 and 8, or any of the remaining claims that depend therefrom. Applicants thus respectfully request the Examiner to reconsider this rejection and find claims 1-10 to be in condition for allowance. If for some reason or other the Examiner does not agree that this case is ready to issue and that an interview or telephone conversation would further the prosecution, the Examiner is invited to contact applicants' attorney at the telephone number listed below.

Respectfully submitted,

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Reg. No. 30509 Attorney for applicants

610-346-7112

Date: 1/27/03



Underlined and bracketed claim amendments for App. No. 09/757,454

- 1. (Amended) A voice-operated arrangement for interacting with a dual-tone multifrequency (DTMF)-controlled system, the arrangement comprising
- a speech recognition unit responsive to voice commands from a user and generating a digital signal representative of a particular received voice command;

a speech-to-DTMF tones application, responsive to the digital signal outputs from the speech recognition unit for accessing a proper user record from a plurality of user records, retrieving dial-out information for [the accessed user's] a DTMF-controlled system associated with the user and completing a communication path between the user and said associated DTMF-controlled system, wherein said voice-operated arrangement monitors the communication path and retrieves predetermined voice commands uttered by the user and translates said predetermined voice prompts into DTMF tones which are thereafter transmitted to said associated DTMF-controlled system.

- 4. (Amended) The arrangement as defined in claim 1 wherein [each] a plurality of different DTMF-controlled systems are associated with a user and the user record comprises a plurality of different fields for each DTMF-controlled system [associated with that user] of said plurality of DTMF-controlled systems.
- 5. (Amended) The arrangement as defined in claim 4 wherein the plurality of different fields for[a] each DTMF-controlled system of the plurality of DTMF-controlled systems in a user record comprises a dial-out access number for [the] each DTMF-controlled system and a mapping of a plurality of voice commands to an associated plurality of DTMF tone sequences.
- 6. (Amended) The arrangement as defined in claim 5 wherein the plurality of different fields comprises a series of DTMF tones for accessing the proper DTMF-controlled system within the [user's] plurality of [such] <u>DTMF-controlled</u> systems.